



162895



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

JON S. CORZINE
Governor

LISA P. JACKSON
Acting Commissioner

PI # 000297

IN THE MATTER OF THE
SHIELDALLOY METALLURGICAL
CORPORATION SITE

ADMINISTRATIVE CONSENT

AND

ORDER

SHIELDALLOY METALLURGICAL
CORPORATION and

TRC COMPANIES, INC.

Respondents

This Administrative Consent Order is issued pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection (hereinafter "the Department" or "DEP") by N.J.S.A. 13:1D-1 through -19, the Solid Waste Management Act, N.J.S.A. 13:1E-1 through -91, and the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11 et seq., and the Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., and duly delegated to the Assistant Director, Division of Remediation Support, Oversight Resources Allocation Elenient, pursuant to N.J.S.A. 13:1B-4.

FINDINGS

1. The Shieldalloy Metallurgical Corporation Site is located at 12 West Boulevard, also known as including Block 209, Lots 2 and 7 and Block 1002, Lots 1, 2, 3, 3.01, 4, 5, 15, 15.01, 16 and 18 on the tax maps of the Borough of Newfield, Gloucester County, and Block 8, Lot 13-1 and Block 84, Lots 4-1 and 5 on the tax maps of the City of Vineland, Cumberland County (hereinafter "the site") and is the subject of this Administrative Consent Order.

2. Since 1951, Shieldalloy Metallurgical Corporation (hereinafter "Shieldalloy"), has owned and operated a chromium alloy and specialty alloy manufacturing facility at the Site.

3. Shieldalloy is a Delaware Corporation with its corporate offices located at 545 Beckett Road, Suite 201, Swedesboro, New Jersey and is a party executing this Administrative Consent Order.

4. TRC Companies, Inc. (hereinafter "TRC") is a Delaware Corporation, with its corporate offices located at 21 Griffin Road North, Windsor, Connecticut, and is a party executing this Administrative Consent Order.

5. On October 5, 1988 the Department entered into an Administrative Consent Order with Shieldalloy for the remedial investigation and cleanup of the Site. The Administrative Consent Order was amended on August 31, 1989 and again on September 11, 1992. These documents are herein incorporated by reference into this document.

6. As required by the March 26, 1997 Bankruptcy Settlement, Shieldalloy currently has a Letter of Credit in the amount of \$4,250,000.00 established as a security for the "NRC Slag Remediation" environmental project to be completed at the Site. This ACO in no way affects the requirement to maintain this financial assurance.

7. This Administrative Consent Order shall serve to add TRC as a signatory to this Administrative Consent Order and to define the remedial work that will be conducted by each party.

8. By entering this Administrative Consent Order, neither Shieldalloy nor TRC admit to any fact, fault or liability under any statute or regulation concerning the condition of the Site nor waives any rights or defenses with regard to the site except as specifically provided in this Administrative Consent Order.

9. This Administrative Consent Order is, to the greatest extent possible, consistent with and complies with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. §9601, et seq., and the National Oil and Hazardous Substance Pollution Contingency Plan (NCP), 40 C.F.R. §300.1, et seq. All activities undertaken by Shieldalloy and TRC pursuant to this Administrative Consent Order shall be performed in accordance with the requirements of all applicable federal and state laws and regulations. The activities conducted pursuant to this Administrative Consent Order, if approved by the Department, shall be considered to be consistent with the NCP.

10. The scope of the investigation and remediation required by this Administrative Consent Order will include all contaminants at the above referenced Site, and all contaminants, which are emanating from or which have emanated from the Site except as excluded herein.

ORDER

11. Contamination is known to exist at and emanating from the site, including but not limited to soil contamination with radioactive material and perchlorate contamination in the groundwater. The radioactive material is regulated by the Nuclear Regulatory Commission, and Shieldalloy is required to remediate that radioactive contamination pursuant to its Nuclear Regulatory Commission Source Material License, SMB-743. New Jersey also regulates radioactive material pursuant to the Radiation Protection Act, N.J.S.A. 26:2D and the implementing regulations, including but not limited to the Soil Remediation Standards for Radioactive Material, N.J.A.C. 7:28-12, and reserves any rights it may have with respect to the radioactive materials at the Site. The Department asserts that perchlorate is a pollutant pursuant to the New Jersey Water Pollution Control Act.

Shieldalloy is required to remediate the perchlorate contamination at and emanating from the site. TRC will have no obligation for such remediation.

12. Shieldalloy herein agrees to conduct all remedial activities necessary to address the radioactive and perchlorate contamination at and/or emanating from the site, and TRC shall have no responsibility for such remediation.

13. Shieldalloy is required to remediate the perchlorate contamination in the ground water at and emanating from the Site to an action level of 5 ppb. If, a different regulatory standard for perchlorate is adopted, and the codified concentration limit for ground water is higher than 5 ppb, then Shieldalloy shall remediate the perchlorate contamination to that different regulatory standard.

14. TRC herein agrees to conduct all remedial activities necessary to address all contaminants not including the radioactive contamination and/or perchlorate contamination at and/or emanating from the site.

15. Should TRC fail to conduct and/or complete remediation activities at the Site, upon notification from the Department Shieldalloy shall conduct all remaining remedial work as required by the Department.

I. Industrial Site Recovery Act Requirements

16. Shieldalloy's and TRC's compliance with the requirements of this Administrative Consent Order shall satisfy the remedial requirements of the Industrial Site Recovery Act. Should there be a triggering event at the Site, Shieldalloy shall follow the administrative requirements of Act. The Department's notification under paragraph 84 of this Administrative Consent Order, namely that the obligations of this Administrative Consent Order are completed, shall also signify that the ISRA requirements have been met.

II. Remedial Investigation of Perchlorate

17. Within sixty (60) calendar days after the effective date of this Administrative Consent Order or as otherwise approved in writing by the Department, Shieldalloy agrees to submit to the Department a detailed Remedial Investigation Work Plan (hereinafter the "RI Work Plan") in accordance with N.J.A.C. 7:26E to address the perchlorate contamination.

18. Within thirty (30) calendar days after receipt of the Department's written comments on the RI Work Plan, or as otherwise approved in writing by the Department, Shieldalloy agrees to modify the RI Work Plan to conform to the Department's comments and agrees to submit the modified RI Work Plan to the Department. The determination as to whether or not the modified RI Work Plan, as resubmitted, conforms to the Technical Requirements for Site Remediation, N.J.A.C. 7:26E, and the Department's written comments and is otherwise acceptable to the Department shall be made solely by the Department in writing.

19. Upon receipt of the Department's written final approval of the RI Work Plan, Shieldalloy agrees to conduct the remedial investigation in accordance with the approved RI Work Plan and the schedule therein.

20. Shieldalloy agrees to submit to the Department a Remedial Investigation Report (hereinafter "RI Report") in accordance with N.J.A.C. 7:26E and the RI Work Plan and the schedule therein.

21. If upon review of the RI Report the Department determines that additional remedial investigation is required, Shieldalloy agrees to conduct additional remedial investigation as required by the Department including submission of another RI Workplan and schedule, and submit another RI Report.

22. Within thirty (30) calendar days after receipt of the Department's written comments on the RI Report, or longer as authorized by the Department, Shieldalloy agrees to modify the RI Report to conform to the Department's comments and agrees to submit the modified RI Report to the Department. The determination as to whether or not the modified RI Report, as resubmitted, conforms with the Technical Requirements for Site Remediation, N.J.A.C. 7:26E, and the Department's written comments and is otherwise acceptable to the Department shall be made solely by the Department in writing.

23. Within sixty (60) calendar days after receipt of the Department's written final approval of the RI Report or as otherwise approved in writing by the Department, Shieldalloy agrees to submit to the Department a Feasibility Study (hereinafter the "FS Report") to address the perchlorate contamination.

24. Within thirty (30) calendar days after receipt of the Department's written comments on the FS Report, or as otherwise approved in writing by the Department, Shieldalloy agrees to modify the FS Report to conform to the Department's comments and agrees to submit a modified FS Report to the Department. The determination as to whether or not the modified FS Report, as resubmitted, conforms the Department's written comments and is otherwise acceptable to the Department shall be made solely by the Department in writing.

III. Remedial Action for Perchlorate

25. Within sixty (60) calendar days after the signing of a Record of Decision for the Perchlorate Plume Operable Unit (hereinafter "OU1-Perchlorate"), or as otherwise approved in writing by the Department, Shieldalloy agrees to submit to the Department a Draft Final Remedial Design Report for OU1-Perchlorate, including an implementation schedule.

26. Within thirty (30) calendar days after receipt of the Department's written comments on the Draft Final Design Report for OU1-Perchlorate, or as otherwise approved in writing by the Department, Shieldalloy agrees to modify the Draft Final Design Report for OU1-Perchlorate to conform to the Department's comments and agrees to submit a Final Design

Report for OU1-Perchlorate to the Department. The determination as to whether or not the Final Design Report for OU1-Perchlorate, as submitted, conforms to the Department's written comments and is otherwise acceptable to the Department shall be made solely by the Department in writing.

27. Upon receipt of the Department's written final approval of the Final Design Report for OU1-Perchlorate, Shieldalloy agrees to implement the approved Final Design Report for OU1-Perchlorate in accordance with the schedule therein.

28. Within thirty (30) calendar days after receipt of the Department's written approval of the Final Design Report for OU1-Perchlorate, Shieldalloy agrees to submit to the Department a Remedial Action Work Plan for OU1-Perchlorate in accordance with N.J.A.C. C. 7:26E, including an implementation schedule.

29. Within thirty (30) calendar days after receipt of the Department's written comments on the Remedial Action Work Plan for OU1-Perchlorate, or as otherwise approved in writing by the Department, Shieldalloy agrees to modify the Remedial Action Work Plan for OU1-Perchlorate to conform to the Department's comments and agree to submit the modified Remedial Action Work Plan for OU1-Perchlorate to the Department. The determination as to whether or not the modified Remedial Action Work Plan for OU1-Perchlorate, as resubmitted, conforms to the Technical Requirements for Site Remediation, N.J.A.C. 7:26E, and the Department's written comments and is otherwise acceptable to the Department shall be made solely by the Department in writing.

30. Upon receipt of the Department's written final approval of the Remedial Action Work Plan for OU1-Perchlorate, Shieldalloy agrees to implement the approved Remedial Action Work Plan for OU1-Perchlorate in accordance with the schedule therein.

31. Shieldalloy agrees to submit to the Department a Remedial Action Report for OU1-Perchlorate in accordance with the Technical Requirements for Site Remediation, N.J.A.C. 7:26E, the Remedial Action Work Plan for OU1-Perchlorate and the schedule therein.

32. If upon review of the Remedial Action Report for OU1-Perchlorate the Department determines that additional remediation is required, Shieldalloy agrees to conduct additional remediation as directed by the Department and agrees to submit subsequent RI Reports and Remedial Action Reports, as applicable.

33. Within thirty (30) calendar days after receipt of the Department's written comments on the Remedial Action Report for OU1-Perchlorate, or longer as authorized by the Department, Shieldalloy agrees to modify the Remedial Action Report for OU1-Perchlorate to conform with the Department's comments and agrees to submit the modified Remedial Action Report for OU1-Perchlorate to the Department. The determination as to whether or not the modified Remedial Action Report for OU1-Perchlorate, as resubmitted, conforms to the Technical Requirements for Site Remediation, N.J.A.C. 7:26E, and the Department's written comments and is otherwise acceptable to the Department shall be made solely by the Department in writing.

IV. Remedial Action for OU1

34. Within 180 calendar days after the effective date of this Administrative Consent Order or as otherwise approved in writing by the Department, TRC agrees to submit to the Department a Draft Final Design Report for the Ground Water Operable Unit (hereinafter "OU1"). The Draft Final Design Report for OU1 shall provide the details for the implementation of the Selected Remedy documented in the Record of Decision for OU1 dated September 24, 1996, including an implementation schedule.

35. Within thirty (30) calendar days after receipt of the Department's written comments on the Draft Final Design Report for OU1, or as otherwise approved in writing by the Department, TRC agree to modify the Draft Final Design Report for OU1 to conform to the Department's comments and agrees to submit a Final Design Report for OU1 to the Department. The determination as to whether or not the Final Design Report for OU1, as submitted, conforms to the Department's written comments and is otherwise acceptable to the Department shall be made solely by the Department in writing.

36. Upon receipt of the Department's written final approval of the Final Design Report for OU1, TRC agrees to implement the approved Final Design Report for OU1 in accordance with the schedule therein.

37. Within thirty (30) calendar days after receipt of the Department's written approval of the Final Design Report for OU1, TRC agrees to submit to the Department a Remedial Action Work Plan for OU1 in accordance with N.J.A.C. 7:26E, including an implementation schedule.

38. Within thirty (30) calendar days after receipt of the Department's written comments on the Remedial Action Work Plan for OU1, or as otherwise approved in writing by the Department, TRC agree to modify the Remedial Action Work Plan for OU1 to conform to the Department's comments and agree to submit the modified Remedial Action Work Plan for OU1 to the Department. The determination as to whether or not the modified Remedial Action Work Plan for OU1, as resubmitted, conforms to the Technical Requirements for Site Remediation, N.J.A.C. 7:26E, the Department's written comments and is otherwise acceptable to the Department, shall be made solely by the Department in writing.

39. Upon receipt of the Department's written final approval of the Remedial Action Work Plan for OU1, TRC agrees to implement the approved Remedial Action Work Plan for OU1 in accordance with the schedule therein.

40. TRC agrees to submit to the Department a Remedial Action Report for OU1 in accordance with the Technical Requirements for Site Remediation, N.J.A.C. 7:26E, the Remedial Action Work Plan for OU1 and the schedule therein.

41. If upon review of the Remedial Action Report the Department determines that additional remediation is required, Shieldalloy and TRC agree to conduct additional

remediation as directed by the Department and agree to submit subsequent RI Reports and Remedial Action Reports, as applicable.

42. Within thirty (30) calendar days after receipt of the Department's written comments on the Remedial Action Report for OU1, or longer as authorized by the Department, TRC agrees to modify the Remedial Action Report for OU1 to conform with the Department's comments and agrees to submit the modified Remedial Action Report for OU1 to the Department. The determination as to whether or not the modified Remedial Action Report for OU1, as resubmitted, conforms to the Technical Requirements for Site Remediation, N.J.A.C. 7:26E, and the Department's written comments and is otherwise acceptable to the Department shall be made solely by the Department in writing.

V. Soil, Surface Water and Sediment

43. Within sixty (60) calendar days after the signing of a Record of Decision for the Soil, Surface Water and Sediment Operable Unit (hereinafter "OU2"), or as otherwise approved in writing by the Department, TRC agrees to submit to the Department a Draft Final Remedial Design Report for OU2, including an implementation schedule. TRC shall incorporate the requirements of the Scope of Work for Natural Resource Restoration Plan dated June 24, 1996 into the Draft Final Remedial Design Report for OU2.

44. Within thirty (30) calendar days after receipt of the Department's written comments on the Draft Final Design Report for OU2, or as otherwise approved in writing by the Department, TRC agrees to modify the Draft Final Design Report for OU2 to conform to the Department's comments and agrees to submit a Final Design Report for OU2 to the Department. The determination as to whether or not the Final Design Report for OU2, as submitted, conforms to the Department's written comments and is otherwise acceptable to the Department shall be made solely by the Department in writing.

45. Upon receipt of the Department's written final approval of the Final Design Report for OU2, TRC agrees to implement the approved Final Design Report for OU2 in accordance with the schedule therein.

46. Within thirty (30) calendar days after receipt of the Department's written approval of the Final Design Report for OU2, TRC agrees to submit to the Department a Remedial Action Work Plan for OU2 in accordance with N.J.A.C. 7:26E, including an implementation schedule.

47. Within thirty (30) calendar days after receipt of the Department's written comments on the Remedial Action Work Plan for OU2, or as otherwise approved in writing by the Department, TRC agrees to modify the Remedial Action Work Plan for OU2 to conform to the Department's comments and agree to submit the modified Remedial Action Work Plan for OU2 to the Department. The determination as to whether or not the modified Remedial Action Work Plan for OU2, as resubmitted, conforms to the Technical Requirements for

Site Remediation, N.J.A.C. 7:26E, and the Department's written comments and is otherwise acceptable to the Department shall be made solely by the Department in writing.

48. Upon receipt of the Department's written final approval of the Remedial Action Work Plan for OU2, TRC agrees to implement the approved Remedial Action Work Plan for OU2 in accordance with the schedule therein.

49. TRC agrees to submit to the Department a Remedial Action Report for OU2 in accordance with the Technical Requirements for Site Remediation, N.J.A.C. 7:26E, the Remedial Action Work Plan for OU2 and the schedule therein.

50. If upon review of the Remedial Action Report for OU2 the Department determines that additional remediation is required, TRC agrees to conduct additional remediation as directed by the Department and agrees to submit subsequent RI Reports and Remedial Action Reports, as applicable.

51. Within thirty (30) calendar days after receipt of the Department's written comments on the Remedial Action Report for OU2, or longer as authorized by the Department, TRC agrees to modify the Remedial Action Report for OU2 to conform with the Department's comments and agrees to submit the modified Remedial Action Report for OU2 to the Department. The determination as to whether or not the modified Remedial Action Report for OU2, as resubmitted, conforms to the Technical Requirements for Site Remediation, N.J.A.C. 7:26E, and the Department's written comments and is otherwise acceptable to the Department shall be made solely by the Department in writing.

IV. Additional Remedial Investigation and Remedial Action

52. If at any time that this Administrative Consent Order is in effect the Department determines that the prevailing standards in N.J.A.C. 7:26E are not being achieved or that additional remediation is required to protect the public health and safety and the environment, TRC agrees to conduct such additional remediation as the Department directs.

V. Progress Reports

53. Shieldalloy and TRC agree to submit quarterly progress reports which detail the status of Shieldalloy and TRC's compliance with this Administrative Consent Order to the Department in accordance with N.J.A.C. 7:26E-6.6(b). Shieldalloy and TRC agree to submit the first progress report on or before the last calendar day of the fourth calendar month following the effective date of this Administrative Consent Order. Shieldalloy and TRC agree to submit a progress report thereafter on or before the last calendar day of the month following the next three calendar months being reported. Shieldalloy and TRC may request that the Department allow progress reports be submitted semi-annually or annually.

VI. Project Coordination

54. Shieldalloy and TRC agree to submit to the Department all documents required by this Administrative Consent Order, including correspondence relating to force majeure issues, by delivery with an acknowledgement of receipt from the Department. The date that the Department executes the acknowledgement will be the date the Department uses to determine Shieldalloy's and TRC's compliance with the requirements of this Administrative Consent Order and the applicability of penalties and any other remedies available to the Department.

55. Within seven (7) calendar days after the effective date of this Administrative Consent Order, Shieldalloy and TRC agree to submit to the Department the name, title, address and telephone number of the individual who shall be their technical contact for the Department for all matters concerning this Administrative Consent Order and Shieldalloy and TRC agree that this person is therefore determined to be Shieldalloy's and TRC's agent for the purpose of service for all matters concerning this Administrative Consent Order. In the event the Department determines that a meeting concerning the remediation of the site is necessary, the Department will provide notification to this agent of the date, time and place of such meeting. Shieldalloy and TRC agree to ensure that the agent is available for and participates in such meeting.

56. Within seven (7) days after the effective date of this Administrative Consent Order the Department will identify the individual who will be the Department's contact for all matters concerning this Administrative Consent Order. Unless the Department otherwise directs in writing, Shieldalloy and TRC agree to submit all payments and copies of all documents required by this Administrative Consent Order to the Department's contact.

57. Shieldalloy and TRC agree to notify, both verbally and in writing, the Department's contact person identified pursuant to Paragraph 55, above, at least fourteen (14) calendar days prior to the initiation of any field activities at the Site which are related to remediation, development or redevelopment.

58. The Department will consider a written request for an extension of time to perform any requirement in this Administrative Consent Order, provided that Shieldalloy and TRC submit any extension request to the Department two weeks prior to any applicable deadline to which the extension request refers.

VII. Remediation Funding Source and Remediation Funding Source Surcharge

59. Shieldalloy and TRC agree to establish and maintain for the duration of this Administrative Consent Order a remediation funding source in an amount equal to the Department-approved estimate of the remediation costs related to compliance with this Administrative Consent Order, including all operation, maintenance and monitoring costs of all engineering and institutional controls, pursuant to N.J.A.C. 7:26E-8, used to remediate the Site, pursuant to N.J.A.C. 7:26C-7. Shieldalloy and TRC agree that the initial remediation funding source amount is \$ 13,500,000.00.

60. Shieldalloy agrees to establish and maintain for the duration of this Administrative Consent Order a remediation funding source in an amount equal to the Department-approved estimate of the remediation costs related to compliance with this Administrative Consent Order specifically for the remediation of perchlorate contamination, including all operation, maintenance and monitoring costs of all engineering and institutional controls, pursuant to N.J.A.C. 7:26E-8, used to remediate the perchlorate, pursuant to N.J.A.C. 7:26C-7. Shieldalloy agrees that the initial remediation funding source amount for perchlorate is \$ 600,000.00.

61. Shieldalloy and TRC agree to pay an annual remediation funding source surcharge if required to do so pursuant to N.J.A.C. 7:26C-7.8.

VIII. Project Cost Review

62. Beginning three hundred sixty-five (365) calendar days after the effective date of this Administrative Consent Order, and annually thereafter on the same calendar day, Shieldalloy and TRC agree to submit to the Department a detailed review of all remediation costs expended by Shieldalloy and TRC to comply with this Administrative Consent Order including:

- a) A detailed summary of all monies spent to date pursuant to this Administrative Consent Order;
- b) The detailed estimated remediation costs required to comply with this Administrative Consent Order, including all operation, maintenance and monitoring costs; and
- c) The reason for any changes from the previously submitted cost review.

63. At any time after Shieldalloy and TRC submit the first cost review pursuant to the preceding paragraph Shieldalloy and TRC may request the Department's approval to reduce the amount of the remediation funding source to reflect the remaining remediation costs necessary to comply with obligations under this Administrative Consent Order. If the Department grants written approval to such a request, Shieldalloy and TRC may amend the amount of the then existing remediation funding source consistent with that approval.

64. If the estimated costs of meeting Shieldalloy and TRC's obligations in this Administrative Consent Order at any time increase to an amount greater than the remediation funding source; Shieldalloy and TRC agree to within thirty (30) calendar days after receipt of written notice of the Department's determination, increase the amount of the then existing remediation funding source or provide an additional remediation funding source such that the total amount equals the Department's approved estimated cost.

65. If Shieldalloy and TRC implement a remedial action at the site that includes institutional and/or engineering controls pursuant to N.J.A.C. 7:26E-8, then Shieldalloy and TRC agree to maintain a remediation funding source, pursuant to N.J.A.C. 7:26C-7, in

an amount that is sufficient to pay for the operation, maintenance and monitoring of the engineering and institutional controls.

IX. Oversight Cost Reimbursement

66. Within thirty (30) calendar days after receipt from the Department of a written summary of the Department's oversight costs, including all accrued interest incurred pursuant to paragraph 68, determined pursuant to N.J.A.C. 7:26C-9.3, Shieldalloy and TRC agree to submit to the Department a cashier's or certified check payable to the "Treasurer, State of New Jersey" and submitted with DEP Form 062A, for the full amount of the Department's oversight costs, for the period being charged.

67. Shieldalloy and TRC agree that its agreement here to pay the Department's oversight costs will continue after the Department's termination of this Administrative Consent Order as provided herein for those oversight costs that have accrued prior to that termination.

68. Shieldalloy and TRC also agree to pay interest on the unpaid balance of oversight costs, beginning at the end of the thirty (30) calendar day period established in the preceding paragraph, at the rate established by Rule 4:42 of the current edition of the Rules Governing the Courts of the State of New Jersey.

X. Reservation of Rights

69. The Department reserves the right to unilaterally terminate this Administrative Consent Order in the event that the Department determines that Shieldalloy and TRC have violated the terms of this Administrative Consent Order. Before the Department unilaterally terminates this Administrative Consent Order, the Department will notify Shieldalloy and TRC in writing of the obligation(s) which one or both have not performed, and Shieldalloy and TRC shall have thirty (30) calendar days after receipt of such notice to perform such obligation(s).

70. Nothing in this Administrative Consent Order precludes the Department from seeking civil or civil administrative penalties or any other legal or equitable relief against Shieldalloy and TRC for violations of this Administrative Consent Order. In any such action brought by the Department under this Administrative Consent Order for injunctive relief, civil, or civil administrative penalties, Shieldalloy and TRC may raise, among other defenses, a defense that Shieldalloy and TRC failed to comply with a decision of the Department, made pursuant to this Administrative Consent Order, on the basis that the Department's decision was arbitrary, capricious or unreasonable. If Shieldalloy and TRC are successful in establishing such a defense based on the administrative record, Shieldalloy and TRC shall not be liable for penalties for failure to comply with that particular requirement of the Administrative Consent Order. Although Shieldalloy and TRC may raise such defenses in any action initiated by the Department for injunctive relief, Shieldalloy and TRC hereby agree not to otherwise seek review of any decision made or to be made by the Department pursuant to this Administrative Consent Order and

under no circumstances shall Shieldalloy and TRC initiate any action or proceeding challenging any decision made or to be made by the Department pursuant to this Administrative Consent Order.

71. Except as otherwise stated in this Administrative Consent Order, nothing herein shall be construed as limiting any legal, equitable or administrative remedies which Shieldalloy and TRC may have under any applicable law or regulation. In any enforcement action the Department initiates pursuant to this Administrative Consent Order, Shieldalloy and TRC reserve any defenses which the Spill Compensation and Control Act, *Matter of Kimber Petroleum Corp.*, 110 N.J. 69 (1988) or their amendments, supplements and progeny allow.

72. This Administrative Consent Order shall not be construed to affect or waive the claims of federal or state natural resources trustees against any person for damages or injury to, destruction of, or loss of natural resources; provided, however, that this Administrative Consent Order shall also not affect or waive any defenses of any person as to such claims, including but not limited to the defense that all federal and/or state natural resource damage liability, if any, was fully resolved by virtue of the March 26, 1997 Bankruptcy Settlement among Shieldalloy, the State of New Jersey and the United States, specifically referencing but not limited to Paragraphs 7.g. and 7.i. of that Agreement.

73. Except as otherwise set forth herein, by the execution of this Administrative Consent Order the Department does not release Shieldalloy and TRC from any liabilities or obligations Shieldalloy and TRC may have pursuant to any other authority, nor does the Department waive any of its rights or remedies pursuant thereto.

XI. Force Majeure

74. If any event specified in the following paragraph occurs which Shieldalloy and TRC believe or should believe will or may cause delay in the compliance or cause non-compliance with any provision of this Administrative Consent Order, Shieldalloy and TRC agree to notify the Department in writing within seven (7) calendar days of the start of delay or knowledge of the anticipated delay, as appropriate, referencing this paragraph and describing the anticipated length of the delay, the precise cause or causes of the delay, any measure taken or to be taken to minimize the delay, and the time required to take any such measures to minimize the delay. Shieldalloy and TRC agree to take all necessary action to prevent or minimize any such delay.

75. The Department will extend in writing the time for performance for a period no longer than the delay resulting from such circumstances as determined by the Department only if:

a) Shieldalloy and TRC have complied with the notice requirements of the preceding paragraph;

b) Any delay or anticipated delay has been or will be caused by fire, flood, riot, strike or other circumstances beyond the control of Shieldalloy and TRC; and

c) Shieldalloy and TRC have taken all necessary action to prevent or minimize any such delay.

76. The burden of proving that any delay is caused by circumstances beyond the control of Shieldalloy and TRC and the length of any such delay attributable to those circumstances shall rest with Shieldalloy and TRC

77. "Force Majeure" shall not include the following:

a) Delay in an interim requirement with respect to the attainment of subsequent requirements;

b) Increases in the cost or expenses incurred by Shieldalloy and TRC in fulfilling the requirements of this Administrative Consent Order;

c) Contractor's breach, unless Shieldalloy and TRC demonstrates that such breach falls within the above paragraphs; and

d) Failure to obtain access required to implement this Administrative Consent Order, unless denied by a court of competent jurisdiction.

XII. Penalties

78. Shieldalloy and TRC agree to pay penalties for its violations of this Administrative Consent Order and for its violations of a deed notice or declaration of environmental restriction that is part of a remedial action implemented pursuant to this Administrative Consent Order, according to the amounts and conditions in this section.

79. Shieldalloy and TRC agree:

a) That each violation of any requirement, condition or deadline in this Administrative Consent Order constitutes an additional, separate, and distinct violation to which penalties apply;

b) That each day that a violation continues constitutes an additional, separate, and distinct violation to which penalties apply;

c) To pay interest, at the rate set forth in the New Jersey Court Rules, R. 4:42-11(a)i, on any unpaid penalty pursuant to this Administrative Consent Order commencing on the first day after it has agreed to pay a penalty pursuant to this Administrative Consent Order;

d) That nothing in this Administrative Consent Order shall prevent the simultaneous accrual of separate penalties for separate violations of this Administrative Consent Order;

e) That its payment of a penalty pursuant to this Administrative Consent Order does not alter Shieldalloy and TRC's responsibility to complete any requirement of this Administrative Consent Order; and

f) To regard payments of penalties pursuant to this Administrative Consent Order as payments of civil or civil administrative penalties pursuant to the Spill Compensation And Control Act, N.J.S.A. 58:10-23.11 through - 23.14.

80. Shieldalloy and TRC agree to pay a penalty for all violations of this Administrative Consent Order beginning on the first calendar day following the day the noncompliance begins and continually thereafter until the final day of correction of the noncompliance, in the following amounts:

<u>Calendar Days After Due Date</u>	<u>Penalty</u>
1 - 7 days	\$ 500 per calendar day
8 - 14 days	\$ 1,000 per calendar day
15 days and over	\$ 2,500 per calendar day

81. The Department will provide Shieldalloy and TRC with written notice of each violation, including a description of the conditions of this Administrative Consent Order that Shieldalloy and TRC have violated, the date that Shieldalloy and TRC was to have completed each task, the duration of the violation, and the amount of the penalty that is due and owing pursuant to Paragraph 80, above.

82. Shieldalloy and TRC agree to pay each penalty required by this Administrative Consent Order by cashier's check or certified check payable to the "Treasurer, State of New Jersey" accompanied by DEP Form 062A and a letter referencing this Administrative Consent Order and the violations for which Shieldalloy and TRC are submitting the payment within 30 calendar days after its receipt of a penalty payment demand from the Department pursuant to Paragraph 81, above.

83. Shieldalloy and TRC agree that nothing herein shall limit the Department's ability, upon Shieldalloy and TRC's failure to pay a penalty pursuant to this Administrative Consent Order, to pursue civil or civil administrative penalties or take any other enforcement action for any violations of this Administrative Consent Order.

84. Shieldalloy and TRC are jointly and severally liable for penalties for violations of this Administrative Consent Order.

85. Subject to the procedures enumerated in Paragraph 70 above, Shieldalloy and TRC agree to pay a penalty in the amount of the economic benefit (in dollars) which Shieldalloy and TRC have realized as a result of not complying, or by delaying compliance, with the requirements of this Administrative Consent Order, including the following:

- a) The amount of savings realized from avoided capital or noncapital costs resulting from the violation;
- b) The return earned or that may be earned on the amount of the avoided costs;
- c) All benefits accruing to the violator as a result of a competitive market advantage enjoyed by reason of the violation; and
- d) All other benefits resulting from the violation.

86. Shieldalloy and TRC agree that the Department will consider the following factors in determining a penalty for economic benefit:

- a) The amount of capital investments required, and whether they are one-time or recurring;
- b) The amount of one-time nondepreciable expenditures;
- c) The amount of annual expenses;
- d) The useful life of capital;
- e) Applicable tax, inflation and discount rates;
- f) The amount of low interest financing, the low interest rate, and the corporate debt rate; and
- g) Any other factors relevant to economic benefit.

87. If the total economic benefit was derived from more than one violation, Shieldalloy and TRC agree that the Department may apportion the total economic benefit amount among the violations from which it was derived so as to increase each civil administrative penalty assessment to an amount no greater than \$50,000 per violation.

XIII. Dispute Resolution

88. In the event a conflict arises between Shieldalloy and TRC and the Department, Shieldalloy and TRC may institute the Department's dispute resolution process at N.J.A.C. 7:26C-1.4 and 7:26C-9.4 and any other process utilized by the Department.

General Provisions

89. In addition to the Department's statutory and regulatory rights to enter and inspect, Shieldalloy and TRC agree to allow the Department and its authorized representatives access to all areas of the Site Shieldalloy and TRC has access to, at all times, for the purpose of monitoring Shieldalloy and TRC's compliance with this Administrative Consent

Order and/or to perform any remedial activities Shieldalloy and TRC fails to perform as required by this Administrative Consent Order. Shieldalloy and TRC agree that its agreement here to provide the Department with access will continue after the Department's termination of this Administrative Consent Order pursuant to Paragraph 69, below.

90. Shieldalloy and TRC agree to not construe any informal advice, guidance, suggestions, or comments by the Department, or by persons acting on behalf of the Department, as relieving Shieldalloy and TRC of their obligation to obtain written approvals as required herein.

91. Shieldalloy and TRC agree to provide a copy of this Administrative Consent Order to each contractor and subcontractor retained to perform the work required by this Administrative Consent Order and agree to condition all contracts and subcontracts entered for the performance of such work upon compliance with the terms and conditions of this Administrative Consent Order. Shieldalloy and TRC agree to be responsible to the Department for ensuring that its contractors and subcontractors perform the work herein in accordance with this Administrative Consent Order.

92. Nothing in this Administrative Consent Order relieves Shieldalloy and TRC from complying with all other applicable laws and regulations. Compliance with the terms of this Administrative Consent Order shall not excuse Shieldalloy and TRC from obtaining and complying with any applicable federal, state or local permits, statutes, regulations and/or orders while carrying out the obligations imposed by this Administrative Consent Order. This Administrative Consent Order shall not preclude the Department from requiring that Shieldalloy and TRC obtain and comply with any permits, and/or orders issued by the Department under the authority of the Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., the Solid Waste Management Act, N.J.S.A. 13:1 E-1 et seq., and the Spill Compensation and Control Act, N.J.S.A. 58:10:23.11 et seq., for the matters covered herein. The terms and conditions of any such permit shall not be preempted by the terms and conditions of this Administrative Consent Order if the terms and conditions of any such permit are more stringent than the terms and conditions of this Administrative Consent Order. Should any of the measures to be taken by Shieldalloy and TRC during the remediation of any ground water and surface water pollution result in a new or modified discharge as defined in the New Jersey Pollutant Discharge Elimination System ("NJPDES") regulations, N.J.A.C. 7:14A-1 et seq., then Shieldalloy and TRC agree to obtain a NJPDES permit or permit modification from the Department prior to commencement of the activity.

93. All work plans, schedules, and other documents required by this Administrative Consent Order and approved in writing by the Department are incorporated herein and made a part hereof.

94. Upon the receipt of a written request from the Department, Shieldalloy and TRC agree to submit to the Department all data and information, including technical records and contractual documents, concerning contamination at the site, including raw sampling and monitoring data, whether or not such data and information, including technical records and

contractual documents, were developed pursuant to this Administrative Consent Order. Shieldalloy and TRC reserves its right to assert a privilege regarding such documents, but agree not to assert any confidentiality or privilege claim with respect to any data related to site conditions, sampling or monitoring.

95. Shieldalloy and TRC agree to comply with this Administrative Consent Order, which shall be fully enforceable as an Order in the New Jersey Superior Court pursuant to the Department's statutory authority.

96. No modification or waiver of this Administrative Consent Order shall be valid except by written amendment to this Administrative Consent Order duly executed by Shieldalloy and TRC and the Department. Any amendment to this Administrative Consent Order shall be executed by the Department and Shieldalloy and TRC. The Department reserves the right to require the resolution of any outstanding violations of the rules of this prior to executing any such amendment.

97. Shieldalloy and TRC waive their rights to an administrative hearing concerning the entry of this Administrative Consent Order.

98. This Administrative Consent Order shall be governed and interpreted under the laws of the State of New Jersey.

99. If any provision of this Administrative Consent Order or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this Administrative Consent Order or the application of such provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby and each provision of this Administrative Consent Order shall be valid and enforced to the fullest extent permitted by law.

100. This Administrative Consent Order represents the entire integrated agreement between the Department and Shieldalloy and TRC concerning the site subject to this Administrative Consent Order and supersedes all prior negotiations, representations or agreements, either written or oral, unless otherwise specifically provided herein.

101. Within thirty (30) calendar days after the effective date of this Administrative Consent Order, Shieldalloy and TRC agree to record a copy of this Administrative Consent Order with the County Clerk, Gloucester County, State of New Jersey and agree to provide the Department with written verification of compliance with this paragraph which shall include a copy of this Administrative Consent Order stamped "Filed" by the County Clerk.

102. This Administrative Consent Order shall be binding, jointly and severally, on each party, its successors, assignees and any trustee in bankruptcy or receiver appointed pursuant to a proceeding in law or equity. No change in the ownership or corporate status of any party or of the facility or site shall alter party's responsibilities under this Administrative Consent Order.

103. Shieldalloy and TRC agree to preserve, during the pendency of this Administrative Consent Order and for a minimum of ten (10) years after its termination, all data and information, including technical records, potential evidentiary documentation and contractual documents, in its possession or in the possession of Shieldalloy and TRC's divisions, employees, agents, accountants, contractors, or attorneys that relate in any way to the contamination at the site, despite any document retention policy to the contrary. After this ten year period, Shieldalloy and TRC may make a written request to the Department to discard any such documents. Such a request shall be accompanied by a description of the documents involved, including the name of each document, date, name and title of the sender and receiver and a statement of contents. Upon receipt of written approval by the Department, Shieldalloy and TRC may discard only those documents that the Department does not require to be preserved for a longer period. Upon receipt of a written request by the Department, Shieldalloy and TRC agree to submit to the Department all data and information, including technical records and contractual documents or copies of the same. Shieldalloy and TRC reserves whatever rights it may have, if any, to assert any privilege regarding such data or information, however, Shieldalloy and TRC agree not to assert any privilege or confidentiality claims with respect to any data related to site conditions, sampling, or monitoring.

104. Shieldalloy and TRC agree to provide to the Department written notice of the dissolution of its corporate or partnership identity, the liquidation of the majority of its assets or the closure, termination or transfer of operations in accordance with the schedule set forth at N.J.A.C. 7:26B-3.2 prior to such action. Upon such notice, Shieldalloy and TRC agree to submit a cost review pursuant to this Administrative Consent Order to the Department. Shieldalloy and TRC agree to also provide written notice to the Department of a filing of a petition for bankruptcy no later than the first business day after such filing. These requirements shall be in addition to any other statutory requirements arising from the dissolution of corporate or partnership identity, the liquidation of the majority of assets, or the closure, termination or transfer of operations. Upon receipt of notice of dissolution of corporate identity, liquidation of assets or filing of a petition for bankruptcy, the Department may request and, within fourteen (14) days of the Department's written request, the Shieldalloy and TRC agree to obtain and submit to the Department additional remediation funding source pursuant to this Administrative Consent Order.

105. If Shieldalloy and TRC implement a remedial action at the site that includes institutional and/or engineering controls pursuant to N.J.A.C. 7:26E-8, this Administrative Consent Order shall remain in full force and effect including the requirements to maintain a remediation funding source, and to pay an annual 1% surcharge of the total amount of the remediation funding source. This Administrative Consent Order shall otherwise be terminated pursuant to Paragraph 106 below.

106. If Shieldalloy and TRC remediate contaminated soil at the Site to the Department's unrestricted use soil standard and any other contaminated media to the applicable remediation standard, the requirements of this Administrative Consent Order shall be deemed satisfied upon the receipt by Shieldalloy and TRC of written notice from

the Department stating that Shieldalloy and TRC have completed the remediation required by this Administrative Consent Order in accordance with N.J.A.C. 7:26E and has satisfied all financial obligations imposed by this Administrative Consent Order and therefore Shieldalloy and TRC does not need to continue to maintain a remediation funding source nor pay the annual 1 % surcharge, and that no further action is necessary at the Site. The written notice shall also state that the Administrative Consent Order is thereby terminated. Such written notice shall not relieve Shieldalloy and TRC from the obligation to conduct future investigation or remediation activities pursuant to Federal, State or local laws for matters not addressed by this Administrative Consent Order.

107. Shieldalloy and TRC may assert a claim of confidentiality for any information submitted by Shieldalloy and TRC pursuant to this Administrative Consent Order, by following the Department's procedures in N.J.A.C. 7:26B-7.

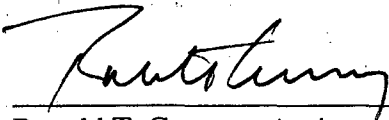
108. Shieldalloy and TRC agree to submit to the Department, along with two original copies of the Administrative Consent Order, signed by Shieldalloy and TRC, documentary evidence, such as a corporate resolution or a certification by a corporate officer, that the signatory has the authority to bind Shieldalloy and TRC to the terms of this Administrative Consent Order, and proof that the remediation funding source has been established pursuant to N.J.A.C. 7:26C-7.

109. This Administrative Consent Order shall be effective upon the execution of this Administrative Consent Order by the Department and Shieldalloy and TRC.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

Date: 2/1/06

BY:

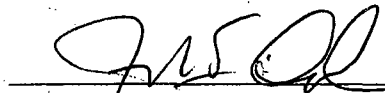


Ronald T. Corcory, Assistant Director
Oversight Resources Allocation Element

SHIELDALLOY METALLURGICAL CORPORATION

Date: 2/1/06

BY:



Signature

JOSEPH D. DIEGEL

Print Full Name Signed Above

Vice-President

Title

TRC Companies, INC.

Date 2/1/06

BY:

M H Dodd
Signature

Martin H. Dodd
Print Full Name Signed Above

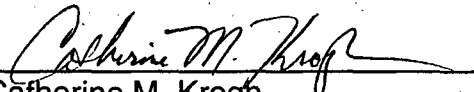
Senior Vice President
Title

CORPORATION CERTIFIED RESOLUTION

I, Catherine M. Krogh, Assistant Secretary of TRC Companies, Inc., a corporation organized and existing under the laws of the State of Delaware (the "Company"), do hereby certify that the following is a true and correct copy of a resolution duly adopted at a meeting of the Board of Directors of the Company duly held and convened on November 18, 2004, at which meeting a duly constituted quorum of the Board of Directors was present and acting throughout, and that such resolution has not been modified, rescinded or revoked, and is at present in full force and effect:

RESOLVED: That Martin H. Dodd, Senior Vice President and Secretary, of TRC Companies, Inc. is empowered and authorized to execute and deliver on behalf of the Company any and all Contracts, Amendments to Contracts, Affidavits, Agreements, or Obligations.

IN WITNESS WHEREOF, the undersigned has affixed her signature and the corporate seal of the Company this 31st day of January, 2006.


Catherine M. Krogh
Assistant Secretary

(Corporate Seal)

CERTIFICATE OF AUTHORITY

I, Catherine M. Krogh, the undersigned, do hereby certify that I am
(Name of Certifying Officer)

the Assistant Secretary of TRC Environmental Corporation, a
(Title of Certifying Officer) (Name of Corporation)

Connecticut corporation, and that the following resolution
(State of Incorporation)

was duly adopted on November 18, 2004, at a duly called and held meeting
(Date of Adoption of Resolution or Annual Meeting Date)

of the Board of Directors of said corporation:

Resolved, that Martin H. Dodd, in his capacity as
(Name of Signer of Contract his/her
or Amendment to Contract)

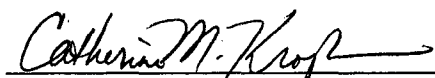
Senior Vice President and Secretary of TRC Companies, Inc.,
(Title of Signer of Contract (Name of Corporation)
or Amendment to Contract)

21 Griffin Road North, Windsor, Connecticut 06095, is hereby authorized to sign any and all
(Company Address)

contracts, amendments to contracts, affidavits, agreements or obligations on behalf of the corporation.

I do further certify that the above resolution has not been amended or revoked and is now
in full force and effect.

Dated this 31st day of January, 2006.


Catherine M. Krogh
Assistant Secretary

(Affix Corporate Seal)

NOTARIAL CERTIFICATE

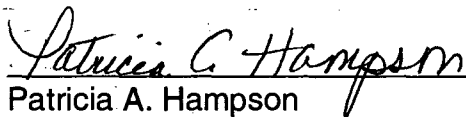
State of Connecticut

ss. Windsor

County of Hartford

On this the 31st day of January, 2006 before me, Patricia A. Hampson, the undersigned officer, personally appeared, Martin H. Dodd who acknowledged himself to be the Senior Vice President and Secretary, of TRC Companies, Inc., a corporation, and acknowledged to me that such corporation executed the within instrument pursuant to its by-laws or a resolution of its Board of Directors and that he as such Senior Vice President and Secretary, being duly authorized to do so, executed the foregoing instrument for the purposes therein, by signing the name of the corporation by himself as Senior Vice President and Secretary.

In witness whereof, I hereunto set my hand.


Patricia A. Hampson

PATRICIA A. HAMPSON
NOTARY PUBLIC
MY COMMISSION EXPIRES JUNE 30, 2007